Special Publication No. 00-3

Strategic Plan for Chinook Salmon Research in the Copper River Drainage

Presented to the Alaska Board of Fisheries
November, 1999
Valdez, Alaska

by
Margaret F. Merritt

November 2000

Alaska Department of Fish and Game

Division of Sport Fish

Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used in Division of Sport Fish Fishery Manuscripts, Fishery Data Series Reports, Fishery Management Reports, and Special Publications without definition. All others must be defined in the text at first mention, as well as in the titles or footnotes of tables and in figures or figure captions.

Weights and measures (metric)

Centimeter	cm
Deciliter	dL
Gram	g
Hectare	ha
Kilogram	kg
Kilometer	km
Liter	L
Meter	m
metric ton	mt
Milliliter	ml
Millimeter	mm

Weights and measures (English)

cubic feet per second	ft^3/s
Foot	ft
Gallon	gal
Inch	in
Mile	mi
Ounce	oz
Pound	lb
Quart	qt
Yard	yd

Spell out acre and ton.

Time and temperature

Day	d
degrees Celsius	°C
degrees Fahrenheit	°F
hour (spell out for 24-hour clock)	h
Minute	min
Second	s

Spell out year, month, and week.

Physics and chemistry

all atomic symbols	
alternating current	AC
Ampere	A
Calorie	cal
direct current	DC
Hertz	Hz
Horsepower	hp
hydrogen ion activity	pH
parts per million	ppm
parts per thousand	ppt, ‰
Volts	V
Watts	W

General

All commonly accepted abbreviations.	e.g., Mr., Mrs., a.m., p.m., etc.
All commonly accepted professional titles.	e.g., Dr., Ph.D., R.N., etc.
and	&
at	@
Compass directions:	
east	E
north	N
south	S
west	W
Copyright	©
Corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
et alii (and other people)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.,
id est (that is)	i.e.,
latitude or longitude	lat. or long.
monetary symbols (U.S.)	$, ¢
months (tables and figures): first three letters	Jan,...,Dec
number (before a number)	# (e.g., #10)
pounds (after a number)	# (e.g., 10#)
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
U.S. state and District of Columbia abbreviations	use two-letter abbreviations (e.g., AK, DC)

Mathematics, statistics, fisheries

alternate hypothesis	H_A
base of natural logarithm	e
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	F, t, χ^2, etc.
confidence interval	C.I.
correlation coefficient	R (multiple)
correlation coefficient	r (simple)
Covariance	cov
degree (angular or temperature)	°
degrees of freedom	df
divided by	÷ or / (in equations)
Equals	=
expected value	E
fork length	FL
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	$\log_2$, etc.
mideye-to-fork	MEF
minute (angular)	'
multiplied by	X
not significant	NS
null hypothesis	H_O
Percent	
Probability	P
probability of a type I error (rejection of the null hypothesis when true)	α
probability of a type II error (acceptance of the null hypothesis when false)	β
second (angular)	"
standard deviation	SD
standard error	SE
standard length	SL
total length	TL
Variance	Var

SPECIAL PUBLICATION NO. 00-3

STRATEGIC PLAN FOR CHINOOK SALMON RESEARCH IN THE COPPER RIVER DRAINAGE

by
Margaret F. Merritt
Division of Sport Fish, Fairbanks

Alaska Department of Fish and Game
Division of Sport Fish, Research and Technical Services
333 Raspberry Road, Anchorage, Alaska, 99518-1599

November 2000

The Special Publications series was established in 1991 for the publication of techniques and procedures manuals, informational pamphlets, special subject reports to decision-making bodies, symposia and workshop proceedings, application software documentation, in-house lectures, and other documents that do not fit in another publication series of the Division of Sport Fish. Special Publications are intended for fishery and other technical professionals. Special Publications are available through the Alaska State Library and on the Internet: http://www.sf.adfg.state.ak.us/statewide/divreports/html/intersearch.cfm This publication has undergone editorial and peer review.

Margaret F. Merritt
Alaska Department of Fish and Game, Division of Sport Fish
1300 College Rd. Fairbanks, AK 99701-1599, USA

This document should be cited as:
Merritt, M. F. 2000. Strategic plan for chinook salmon research in the Copper River drainage. Alaska Department of Fish and Game, Special Publication No. 00-3, Anchorage.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

PREFACE

On August 20, 1998 a meeting was held to initiate the development of a strategic plan for research and related management activities directed towards chinook salmon in the Copper River. A second meeting was held February 9 and 10, 1999 to complete the planning. The draft strategic plan was reviewed by key staff with the Commercial and Sport Fisheries Divisions, Alaska Department of Fish and Game (ADF&G), and was presented to various Fish and Game Advisory Committees in March and April 1999. After comments were incorporated, the strategic plan was finalized in August 1999. A timeline for review and presentation of the strategic plan is outlined in Table 1.

This strategic plan establishes a framework for developing and evaluating goals and objectives, and a process for determining the most important priorities. Included in the strategic plan are the elements for the development of new management plans. There is a "sunset" condition of 2002 on the current Board of Fisheries management plan for Copper River chinook salmon (5 AAC 24.361; see Appendix A). Thus, by 2002 ADF&G, in collaboration with the public, needs to have developed a refined management plan with attainable goals and measurable objectives. The purposes of the meetings were to:

1. review existing policy;
2. discuss and develop fishery management goals;
3. articulate research objectives and management methods to achieve goals; and,
4. determine which of the desired objectives and methods our current research and management programs are addressing, and which remain to be addressed to assist in the long term development of budget proposals and their prioritization.

Participants in the meetings included fishery managers, research biologists and supervisors from Region III, Sport Fish Division and representatives from the Commercial Fisheries Division, Cordova. The strategic plan identifies goals, objectives, issues and options pertaining to all Copper River chinook salmon fisheries, is a product of a cooperative effort between Sport and Commercial Fisheries Divisions staff, and includes public presentations to various Fish and Game Advisory Committees.

MISSION STATEMENT

The mission of the ADF&G is to manage, protect, maintain, and improve the fish, game, and aquatic plant resources of Alaska. The primary goals are to ensure that Alaska's renewable fish and wildlife resources and their habitats are conserved and managed on the sustained yield principle, and the use and development of these resources are in the best interest of the economy and well-being of the people of the state.

Sport Fish Division Goals

1. Conservation of wild stocks of sport fish;
2. Provide a diversity of recreational fishing opportunities; and,
3. Optimize social and economic benefits from recreational fisheries.

Table 1. -Timeline for review and presentation of the strategic research plan, and development of the management plan for chinook salmon in the Copper River.

	Date	Stage of Review
✓	Aug. 20, 1998	Initial meeting with SF and CF division staff to discuss the development of the strategic plan.
✓	Feb. 9-10, 1999	Second meeting with SF and CF division staff to develop a draft strategic plan for chinook salmon in the Copper River.
✓	Mar. 1999	Draft strategic plan reviewed by ADF&G staff – CFD & SFD Region II. Comments due by April 15, 1999.
✓	Mar. 10, 1999	Presentation of draft strategic plan at Fairbanks Advisory Committee.
✓	March – April 1999	Presentations of draft strategic plan to the following advisory committees, groups: Glennallen, Cordova, AHTNA, CRNA, Dipnetters.
✓	May 15, 1999	Final draft of strategic plan completed.
✓	Summer 1999	First field season under the strategic research plan.
✓	Sept. 1999	Mailing of the strategic plan to the following advisory committees: Delta, Palmer/Wasilla, Anchorage, Paxson, Valdez.
✓	Fall 1999	Re-establish the BEG committee
	Nov. 1999	Oral presentation of strategic plan to BOF.
	December 1999	Provide update on results from the first field season under the strategic plan.
	Summer 2000	a. Second field season under the strategic plan. b. Update of the paper, "Management of salmon stocks in the Copper River, report to the BOF, Copper River salmon work group, December 1995".
	January 2001	Recommend working group be established for management planning.
	April 2002	Management plan proposal developed.
	Nov. – Dec. 2002	BOF takes action on the management plan proposal.

INTRODUCTION

The Copper River supports a large and commercially important run of chinook salmon that are also important to upriver personal use, subsistence and sport fishers. Annual harvest in the last five years (1993-1997) has averaged approximately 63,000 chinook salmon. During this same time frame, the commercial fishery accounted for approximately 79% of the total annual harvest while sport fisheries accounted for approximately 12% and personal use and subsistence fisheries combined accounted for 9%. Management of these fisheries is guided by four management plans adopted by the Alaska Board of Fisheries. Harvest information is available inseason for the commercial and personal use fisheries and postseason for the subsistence and sport fisheries. Indices of escapement in the form of aerial survey counts are collected annually for select tributaries, but total return estimates for chinook salmon are lacking. Because of the limited understanding of the escapement and population dynamics, the management plans do not include explicit escapement or harvest goals for chinook salmon. The management plans were largely drafted around information generated from the Miles Lake sonar that operates annually and provides estimates of inriver returns of salmon, but does not apportion counts by species. The concurrent sockeye salmon run is orders of magnitude larger than the chinook salmon run, and in recent years, strengths of both runs have been high.

BACKGROUND OF EXISTING POLICY AND MANAGEMENT STRATEGY

Board of Fisheries Policy

The return is currently managed under four plans (Appendix A): 1) the *Copper River District Salmon Management Plan* (5 AAC 24.360); 2) the *Copper River Chinook Salmon Fishery Management Plan* (5 AAC 24.361); 3) the *Copper River Personal Use Dip Net Salmon Management Plan* (5 AAC 77.590); and 4) the *Copper River Subsistence Salmon Fisheries Management Plans* (5 AAC 01.647). The first plan mandates that the commercial fishery be managed to allow a spawning escapement of 17,500 salmon other than sockeye past the sonar counter at Miles Lake. However, because sonar counts at Miles Lake are not apportioned to species, this plan has little meaning relative to chinook salmon. To provide escapements of chinook salmon at or above historic levels, the second plan attempts to reduce harvest potential of chinook salmon by 5% by providing for emergency order authority to reduce harvests in the commercial fisheries in statistical areas and weeks, by limiting bag limits in the personal use fishery to four chinook salmon per permit holder, and by restricting sport fishing guides from fishing on all Tuesdays from May 15 through July 31. The third plan regulates salmon harvest in the personal use fishery through emergency orders based on projected and actual counts at the Miles Lake Sonar. The fourth plan states that the commercial fishery will be managed to ensure that an adequate escapement reaches the spawning ground and to provide for hatchery brood stock and for subsistence, personal use and sport fisheries.

Escapement Objectives

There are no explicit Board of Fisheries approved escapement objectives for chinook salmon in tributaries of the Copper River drainage. An extensive review of escapement data has been conducted by the Copper-Bering River/Prince William Sound Salmon Biological Escapement Goal (BEG) Interdivisional Review Team. The existing ADF&G Escapement Goal Policy has been in place since 1992. A rewrite of this policy is underway and will likely be completed within the next year. Upon completion of this policy, it is likely that formal escapement goals

will be established for the Copper River system. The BEG committee recommended aerial survey escapement objectives for five tributaries in the Copper River. There was no formal consensus as to whether the objectives should be considered individually, or combined. These objectives are expressed as peak aerial survey counts conducted within a fixed survey time:

Drainage	Stream Segment(s)	Peak Survey Timing	Objective
Chistochina	East Fork Chistochina	17-31 July	500
Gulkana	Indian West Fork-Middle Fork West Fork Middle Fork East Fork Lower Mainstem	22 July-5 August	1,250
Tazlina	Kiana Mendeltna	17 July-2 August	350
Klutina	Manker Saint Anne	17 July-2 August	250
Tonsina	Little Tonsina Greyling	25 July-8 August	350

These escapement objectives were derived from the median of several three year aerial survey peak count data series obtained at peak survey times (ranging from July 17- August 8). Presently there is no information that would allow ADF&G to convert the aerial survey peak counts into actual numbers of spawners, as no calibration studies have been performed.

Management Strategy

Commercial Management

The traditional fishing schedule for the Copper River District is two 24-hour periods per week. Periods begin at 7:00 a.m. on Mondays and 7:00 p.m. on Thursdays. The lengths of fishing periods are adjusted by emergency order as needed. After August 7, coho salmon management begins with two 24-hour periods per week, which is adjusted as needed, based on run strength.

Early in the season, management of the Copper River District is based on the actual harvest as compared to the anticipated harvest. This is the most reliable method of evaluating early run strength prior to the installation of the inriver sonar at Miles Lake. In late May, sonar counts and commercial harvest information become the primary factors governing management of the fishery. The inriver goal for the upper Copper River was increased in 1998 to 617,000 salmon. This increase occurred at the Board of Fisheries (BOF) meeting in December 1996, which provided an increase in the personal use fishery from 60,000 to 100,000 salmon and also authorized ADF&G to set the subsistence harvest annually based on past performance. However, if the commercial fishery is closed for 13 consecutive days due to poor run strength, the personal use allocation drops to 50,000 salmon.

By mid-June, aerial estimates of sockeye salmon escapement in the Copper River Delta systems become an additional consideration when scheduling commercial fishing periods. Due to the many spawning systems in the lower Copper River Delta, an actual weekly escapement index of

escapement index goal for the Copper River Delta is 89,000 sockeye salmon. In general, managers attempt to distribute harvests across the duration of the run, thereby minimizing the chance of overexploiting a particular run segment (uniquely timed stocks).

Personal Use Management

Management of the personal use fishery was designed to provide a reasonable opportunity (through the use of bag limits) to be realized by personal use fishers. Management of this fishery is, for the most part, dictated by harvest and escapement objectives established for sockeye salmon.

Sport Management

Sport fishery management is based on escapement objectives established through aerial surveys of chinook salmon escapement in eight index streams. Aerial surveys are practicable indicators of relative spawning abundance, however are imprecise due to such variables as survey conditions, surveyor, and residency of fish in the survey area. The Statewide Harvest Survey is used postseason to estimate harvest, catch and effort for chinook salmon in the Copper River drainage and is useful for indicating trends in the fisheries. Regulations have been designed to maintain harvests at a level that ensures escapements at or above escapement objectives. A series of regulations have been adopted by the Board of Fisheries that prohibit sport fishing in many of the spawning tributaries where annual escapements are small. Inseason monitoring is conducted by area staff in the form of informal river surveys and angler reports to evaluate effort, river conditions and angler success. Current plans are to continue aerial surveys to index numbers of spawning salmon. Ongoing and future research projects are designed to provide additional information on stock distribution, contribution to the fisheries and to refine escapement objectives.

METHODS

A facilitator led individuals responsible for research and management of Copper River chinook salmon in discussions. A modification of the Nominal Group Technique (Delbecq et al. 1975) was used in eliciting goals and objectives, and brainstorming (Osborn 1963) was encouraged in the identification of issues and options. The Analytic Hierarchy Process (Saaty 1990) was used to structure elements of the plan, and to assign scores of importance based on judgment. Importance was judged according to two criteria: 1) how critical the goal, objective, issue or option is to achieving the mission; and 2) the extent to which the manager has influence. Those elements over which managers have direct authority were given the most weight, those over which managers have some influence were given less weight, and those which just concern managers were given the least weight. Examples: managers have authority to issue emergency orders for fisheries under their jurisdiction; managers can influence the management of other fisheries through communication and collaboration with their counterparts within divisions of ADF&G; managers have concerns about the effects of habitat loss for transboundary salmon populations.

The software program Expert Choice[1] was used interactively to depict the influence of weights and derive the priority of options. Priorities approximate the strength of judgments for each option adjusted to reflect the importance assigned to the goals, objectives and issues addressed

[1] Forman, E., T. Saaty, M. Selly, and R. Waldron. Expert Choice, Decision Support Software, McLean VA. 1983.

by that option. Priorities of options derived from judgments of importance were weighted by additional judgments: cost effectiveness, perceived public support, urgency, and the ability of the proposed project or action to give insight.

RESULTS

The Definition of Goals

Goals are long term achievements that contribute to accomplishing a mission. Five goals were identified to ensure the conservation and wise management of chinook salmon in the Copper River. These goals are as follows:

1. protect wild chinook salmon and their freshwater habitats to provide for ecosystem diversity;

2. maintain escapements by establishing and assessing escapement goals;

3. harvest with caution commensurate with uncertainty;

4. maintain public input and support; and,

5. consider net social and economic benefits to users.

Structure of the Strategic Plan

The strategic plan is structured as a hierarchy of objectives, issues and options, segregated into groups directly related to each goal. Options form the base of the hierarchy (see Figure 1).

Objectives are measurable statements of purpose that contribute to achieving a goal. For each objective, there are one or more issues (concerns or problems) that need to be addressed in the planning and carrying out of options. Options are defined as a possible solution or course of action to take to address an issue, such as a research project. Some issues are already being addressed by existing research projects or management activities. One option can address issues across several objectives or even goals. If one option can solve multiple issues, then that option is efficient.

For some objectives and issues, there are no projects currently being conducted or being considered for funding. These "holes" can be the focal point for further discussions and possibly the development of project budget proposals.

A total of 24 unique options were identified and have been ranked as to their priority (see Figure 2). Each option's rating of importance represents its fraction of the total proportion of points available (1.000). The highest ranked project is "Radiotelemetry", which received a score of 0.170. Not only did this project score high in terms of its importance, but it also was proposed several times as a solution to address various issues. Of the 24 options identified in the strategic plan, 14 (depicted in bold black in Figure 2) are either in progress or have plans for being implemented.

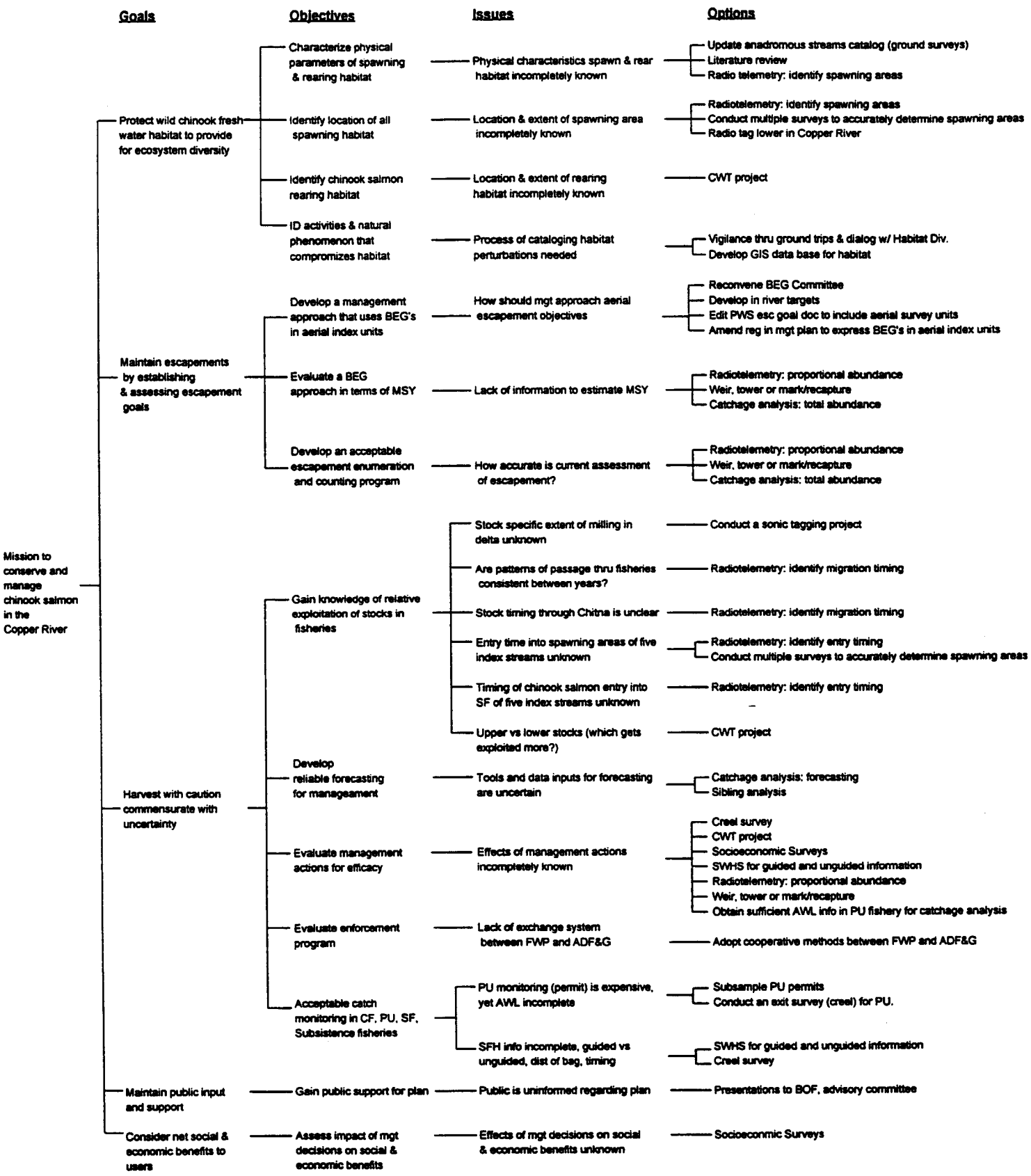

Figure 1. Strategic research plan for chinook salmon in the Copper River.

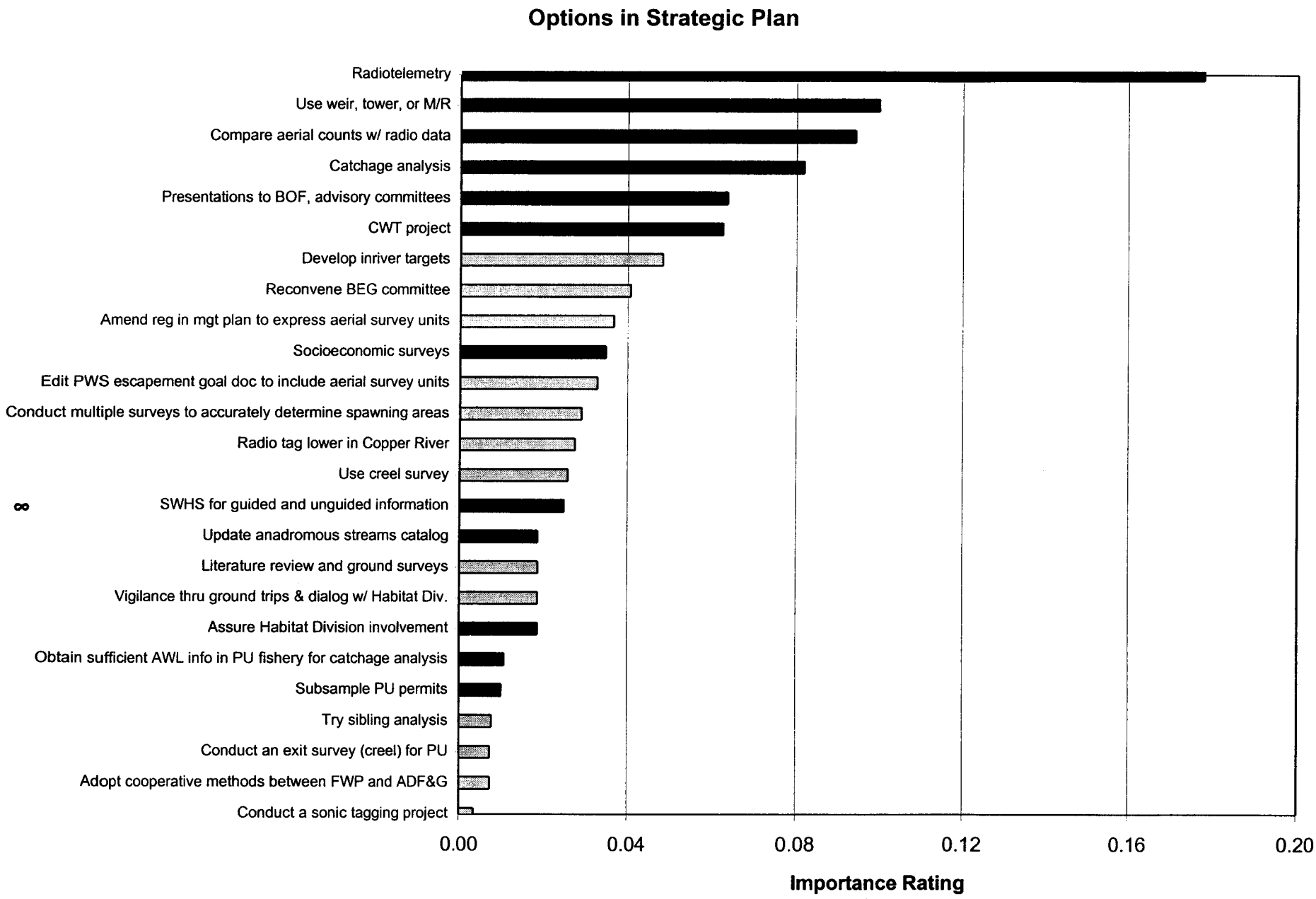

Figure 2. The priority of 24 options for addressing issues in the strategic research plan for chinook salmon in the Copper River. The highest score reflects the most importance. Options with black bars are either completed, in progress, or will soon be completed.

ACKNOWLEDGMENTS

Thanks to Matt Evenson, Tom Taube and Slim Morstad for providing text on the background of existing policy and management strategy. Klaus Wuttig provided technical support with the Expert Choice software.

GLOSSARY

Goal: long term achievement that contributes to accomplishing of mission.

Issue: problems, uncertainties to meeting objectives.

Objective: measurable statement of purpose.

Option: possible solution or course of action to take to address an issue.

Strategic Planning: a continuing process to develop new strategies in response to progress, changes and emerging issues; a systematic activity.

LITERATURE CITED

Delbecq, A., A. Vande Ven, and D. Gustufson. 1975. Group techniques for program planning: a guide to nominal group and Delphi processes. Scott, Foreman and Co., Glenview, Ill.

Osborn, A. 1963. Applied imagination: principles and procedures of creative problem-solving, 3rd Ed. Scribner's, New York.

Saaty, T. 1990. Decision making for leaders. University of Pittsburgh, Pittsburgh Pennsylvania.

APPENDIX A.-BOARD OF FISHERIES SANCTIONED FISHERY MANAGEMENT PLANS FOR CHINOOK SALMON IN THE COPPER RIVER DRAINAGE

5 AAC 01.647. COPPER RIVER SUBSISTENCE SALMON FISHERIES MANAGEMENT PLANS.

(a) The purpose of this plan is to ensure that adequate escapement of salmon in the Copper River system occurs and that subsistence uses, as described under AS 16.05.251 and 5 AAC 99.010, are accommodated.

(b) The following are directives pertaining to the management of Copper River System salmon:
  (1) this policy governs only those salmon which pass the department sonar counters located at the Million Dollar Bridge;
  (2) the department shall manage the Copper River commercial salmon fishery to attain a total escapement of salmon into the Copper River as specified in 5 AAC 24.360 to ensure that an adequate escapement reaches the spawning grounds and to provide for hatchery brood stock and for subsistence, personal use, and sport fisheries;
  (3) repealed 4/28/84
  (4) repealed 4/28/84.

(c) Repealed 4/28/84.

(d) Repealed 4/28/84.

(e) Repealed 4/28/84.

(f) Repealed 4/28/84.

(g) Repealed 4/28/84.

(h) Repealed 4/28/84.

(i) Salmon, other than chinook salmon, may be taken in the vicinity of the former Native village of Batzulnetas under the following conditions:
  (1) unless modified by this subsection, 5 AAC 01.001 – 5 AAC 01.040 – and 5 AAC 01.645 apply to this fishery;
  (2) salmon may be taken only under the authority of a Batzulnetas subsistence salmon fishing permit issued by the department;
  (3) salmon may be taken only in those waters of the Copper River between ADF&G regulatory markers located near the mouth of Tanada Creek and Approximately one-half mile downstream from that mouth and in Tanada Creek between ADF&G regulatory markers identifying the open waters of the creek;
  (4) fish wheels and dip nets only may be use on the Copper River; dip nets and spears only may be used in Tanada Creek;
  (5) salmon may be taken only from June 1 through September 1 or until the season is closed by emergency order; fishing periods are to be established by emergency order and are two days per week during the month of June and 3.5 days per week for the remainder of the season;
  (6) chinook salmon taken must be released the water unharmed; fish wheels must be equipped with a live box or be monitored at all times;
  (7) annual bag and possession limits are as specified in 5 AAC 01.630(f);
  (8) the permit must be returned to the department's Glennallen office no later than September 30 of each year.

(j) Salmon may be taken for subsistence purposes in the waters of the Copper River District described in 5 AAC 24.200, only as follows:
  (1) salmon may be taken only with gillnets no longer than 50 fathoms;
  (2) salmon may be taken only from May 15 through September 30;
  (3) fishing periods are
    (A) from May 15 until two days before the commercial opening of the Copper River District, seven days per week;
    (B) during the commercial salmon fishing season, only during open commercial salmon fishing periods;
    (C) from two days following the closure of the commercial salmon fishing season until September 30, seven days per week. (In effect before 1984; am 4/28/84, Register 90; am 6/2/88, Register 106; am 4/3091, Register 118; readopt 5/15/93, Register 126; am 5/24/97, Register 142; am 5/31/97, Register 142)

Authority: AS 16.05.251 AS 16.05.258

Editor's note: At its February 23 – 27, 1993 meeting, the Board of Fisheries readopted 5 AAC 01.647 in its entirety without change, under ch. 1, SSSLA 1992 (the 1992 subsistence law), which repealed and reenacted AS 16.05.258.

5 AAC 24.360. COPPER RIVER DISTRICT SALMON MANAGEMENT PLAN.

(a) The department shall manage the Copper River District commercial salmon fishery to achieve a biological escapement goal of 300,00 sockeye salmon and 17,500 other salmon into the Copper River.

(b) The department shall manage the Copper River District commercial salmon fishery to achieve an inriver goal of salmon, as measured at the sonar counter near Miles Lake, based on the total of the following categories:

Spawning escapement	300,000 sockeye 17,500 other salmon
Subsistence harvest	60,000-75,000 salmon
Personal use harvest	100,000 salmon
Hatchery brood (sockeye salmon)	estimated annually
Hatchery surplus (sockeye salmon)	estimated annually
TOTAL	announced annually

(c) The department shall establish the subsistence component of the inriver goal within the range of 60,000 – 75,000 salmon to ensure subsistence needs will be met.

(d) If the Copper River District commercial salmon fishery is closed for 13 or more consecutive days, the personal use harvest component of the inriver goal described in (b) of this section is reduced to 50,000 salmon. (In effect before 1988, am 4/30/91, Register 118; am 5/24/97, Register 142; am 1/22/98, Register 145)

Authority: AS 16.05.251 AS 16.05.258

5 AAC 24.361. COPPER RIVER CHINOOK SALMON FISHERY MANAGEMENT PLAN.

(a) For the purpose of providing the escapement of chinook salmon into the Copper River drainage at or above average historical levels, the department shall manage the commercial, personal use and sport fisheries in a manner to reduce the harvest potential of chinook salmon by five percent as provided in this section.

(b) In the commercial fishery, the commissioner, by emergency order, shall open and close season within the inside statistical areas of the Copper River District, applying restrictions after taking into consideration tides and other pertinent environmental factors during statistical week 20 and 21.

(c) In the personal use fishery, the seasonal limit of chinook salmon is reduced to four chinook salmon per permit holder.

(d) In the sport fishery, a guide may not operate in the flowing waters of the Copper River drainage open to chinook salmon fishing on Tuesdays from May 15 through July 31.

(e) The provisions of this section do not apply after December 31, 2002. (Eff. 5/24/97, Register 142)

Authority: AS 16.05.060 AS 16.05.251

5 AAC 77.590. COPPER RIVER PERSONAL USE DIP NET SALMON FISHERY MANAGEMENT PLAN.

(a) Salmon may be taken in the Chitina Subdistrict only under the authority of a Chitina Subdistrict personal use salmon fishing permit. Only one Chitina Subdistrict personal use salmon fishing permit shall be issued to a household per calendar year. A household may not be issued both a Copper River subsistence salmon fishing permit and a Chitina Subdistrict personal use salmon fishing permit.

(b) Salmon may be taken from June 1 through September 30. The commissioner shall establish a preseason schedule, including fishing times, for the period June 1 through August 31 based on daily projected sonar counts at the sonar counter located near Miles Lake. This abundance based preseason schedule will distribute the harvest throughout the season. The commissioner may close, by an emergency order effective June 1, the Chitina Subdistrict personal use salmon fishing season and shall reopen the season, by emergency order, on or before June 11 depending on the strength and timing of the sockeye salmon run. Adjustments shall be made to the preseason schedule based on actual sonar counts compared to the projected counts. If the actual sonar count at Miles Lake is more than the projected sonar count, the commissioner shall close, by emergency order, the season and immediately reopen it during which additional fishing times shall be established. If the actual sonar count at Miles Lake is less than the projected sonar count, the commissioner shall close, by emergency order, the season and immediately reopen it during which fishing times shall be reduced by a corresponding percentage.

(c) Salmon may be taken only with dip nets. Dip nets may be used only in the Chitina Subdistrict downstream from the Chitina-McCarthy Road Bridge to ADF&G regulatory markers located approximately 200 yards upstream of Haley Creek.

(d) Upon landing of fish, a permit holder shall record that person's harvest on a form provided by the department. Permits must be returned to the department and the conditions specified in 5 AAC 77.015(c) must be met.

(e) The seasonal limit for a personal use salmon fishing permit is 15 salmon for a household of one person and 30 salmon for a household of two or more persons, of which no more than four may be chinook salmon. However, when the department determines that a weekly harvestable surplus of 50,000 salmon or greater will be present in the Chitina Subdistrict, the commissioner shall establish, by emergency order, weekly periods during which the department shall issue a supplemental permit for 10 additional sockeye salmon to a permit applicant who has met the seasonal limit. Chinook salmon may not be taken under the authority of a supplemental permit. A supplemental permit will be valid from Monday to the following Sunday of the week in which the surplus salmon are expected to be present in the Chitina Subdistrict. The department may specify other conditions in a supplemental permit. The department may issue an additional supplemental permit to a permitee who has met the limits of a previously issued supplemental permit.

(f) The maximum harvest level for the Chitina Subdistrict personal use salmon fishery is 100,000 salmon, not including any salmon in excess of the inriver goal or salmon taken after August 31. If the Copper River District commercial salmon fishery is closed for 13 or more consecutive days, the maximum harvest level in the Chitina Subdistrict is reduced to 50,000 salmon.

(g) Rainbow or steelhead trout incidentally taken may not be retained and must be returned to the water without further harm. (Eff. 4/28/84, Register 90; am 5/11/85, Register 94; am 7/1/86, Register 99; am 3/29/87, Register 101; am 4/30/91, Register 118; am 5/4/94, Register 130; am 5/24/97, Register 142; am 1/22/98, Register 145; am 4/23/98, Register 146).

Authority: AS 16.05.060 AS 16.05.251